

payors of access charges are asking states, including Washington, to restructure and lower intrastate access charges.¹⁰⁹ The WUTC in 1996 lowered access charges for U S West by 45 percent.¹¹⁰ U S West appealed this order and the Washington Supreme Court upheld the Commission.¹¹¹

Continued use of higher than economic cost access charges is not sustainable in a competitive market. New entrants will lure customers with high toll usage leaving the incumbent company with customers that do not generate the large amounts of access revenue they need to generate sufficient revenue to maintain affordable basic monthly rates. Competitive neutrality and continuation of universal basic service at affordable rates necessitates replacement of support through above-economic-cost access charges with alternative support mechanisms (described later in this section) which are specific, predictable and sufficient.

State Universal Service Funds

Most states have a universal service fund to support high-cost incumbent local exchange companies (also referred to as ILECs). In Washington, there is a surcharge of \$0.00152 on each minute of intrastate long distance access (this does not appear on

¹⁰⁹ See WUTC Docket No. UT-970325, AT&T Petition, and WUTC Docket No. UT-970653, MCI complaint against GTE. The latter case was dismissed because the Commission wants to approach access charge reform on an industry-wide basis rather than on a piece-meal basis.

¹¹⁰ Fifteenth Supplemental Order, WUTC Docket No. UT-950200, p. 110-17.

¹¹¹ US WEST Communications, Inc. v. Washington Utilities and Transportation Commission, Slip Opinion No. 64822-1, Dec. 24, 1997. See also the companion case US WEST Communications, Inc. v. Washington Utilities and Transportation Commission, Slip Opinion No. 64822-2, Dec. 24, 1997. The reduction will go into effect after the Commission issues an implementing order based on the Supreme Court decisions.

customer bills).¹¹² This amounts to almost \$9 million dollars annually, which is used to support companies that have loop costs that exceed 115% of the state-wide average loop costs. Most of these companies are small and serve rural or semi-rural areas.¹¹³ The amount of this fund in Washington represents the smallest contribution compared to the support represented by price-averaging over three million access lines for GTE and USWC and the contribution from access charges, explained above.

Changes Required by The 1996 Telecommunications Act

The passage of the 1996 Telecommunications Act and the subsequent decisions of the FCC have profound effects on mechanisms for supporting universal service. Unlike the 1934 Act, the 1996 Act uses the phrase “universal service,” describes it, and calls for its continuation.¹¹⁴ Requirements are placed on the FCC and the states to make efforts to define and fund affordable, high quality basic services in rural, high-cost and insular areas and to maintain programs for low-income customers.¹¹⁵ At the same time, as described below, states are to promote competition by, among other things, eliminating the traditional, market distorting practices which have historically

¹¹² See WUTC Docket No. U-85-23, Eighteenth Supplemental Order (Dec. 30, 1986) and Washington Exchange Carrier Association tariff WN U-1, Eighth revision of Sheet No. 9 (October 1, 1996). See also WAC 480-80-047 and 048.

¹¹³ Recipients of state universal service are Asotin, Cowiche (recently sold to PTI), Hat Island, Hood Canal, Inland, Kalama, Lewis River, Mashell, McDaniel, PTI, Pioneer, St. John, Tenino, Toledo, Western Wahkiakum, Whidby, and Yelm. GTE receives funds from the National Exchange Carrier Association (NECA) universal service fund for the exchanges it purchased from ConTel in 1995; United (SPRINT) also receive NECA support. Neither Lewis River nor McDaniel will receive funds from NECA in 1998.

¹¹⁴ 47 U.S.C. 254

¹¹⁵ These requirements are described in Section 1 of this report.

provided support for universal service.¹¹⁶ This change, if accomplished properly, will result in no net increase in total spending on telecommunications.¹¹⁷ Universal service is supported today and this report does not recommend support for additional services which would require increased consumer spending.

Generating Support

In some combination, Washington must use new and existing support mechanisms to generate sufficient support to continue universal service. The level of support must be sufficient to ensure reasonably comparable telecommunications services between rural and urban areas and sufficient to ensure service at reasonably comparable rates for urban and rural customers.¹¹⁸ In addition, the rates charged must be affordable. The

¹¹⁶ 47 U.S.C. 254(e). "Any such support should be explicit and sufficient to achieve the purposes of this section." This section applies only to federal universal support mechanisms. In determining whether Congress intended states to abandon implicit supports, it is important to look at subsection (f), outlining state authority, and to the Joint Explanatory Statement of the Congressional conferees. Subsection (f) requires that state support result from "specific, predictable and sufficient mechanisms..." The Congressional conferees state that "[t]o the extent possible, the conferees intend that *any* support mechanisms continued or created under new *section 254* should be explicit rather than implicit as many support mechanisms are today." Additionally, the conferees stated "[i]n keeping with the conferees' intent that *all* universal service support should be clearly identified, [254(e)] states that such support should be made explicit and should be sufficient to achieve the purposes of new section 254." See Joint Explanatory Statement at 131 (emphasis added).

The subsection (f) requirements for specificity and predictability combined with the conferees' references to *section 254* and statements that "any" and "all" support mechanisms should be explicit rule out, for example, continuing to use substantially higher than economic cost access charges as a means of support for high-cost companies. Higher than economic cost access charges vary with minutes of use so they do not produce specific and predictable support. Other implicit support mechanisms employed by states may also have to be abandoned. It is the interpretation of the WUTC that, taken together, subsections (e) and (f) and the Joint Explanatory Statement should be read to require that state universal service support mechanisms should also be explicit. However, this does not mean that support must be provided through an end-user surcharge. When read with 254(b)(4), the conclusion must be that support for universal service is to come from equitable and nondiscriminatory contributions from providers of telecommunications services (See n.25, *supra*, and the recommendation for assessment of contributions from carriers, *infra*).

¹¹⁷ Weinhaus concurs, but notes that there will be increased cost for the schools, libraries and rural health care program administered at the federal level. See Weinhaus, Carol, "The Shell Game: Options for Universal Service," Telecommunications Industries Analysis Project, Boston, October 2, 1997, p. 18 and n.16.

¹¹⁸ 47 U.S.C. 254(b)(3)

WUTC believes, based on the high penetration rates and the relatively limited use¹¹⁹ of the State's telephone assistance program for low income consumers, that current rates are affordable. There is no need to increase telephone rates to support universal service.

Contributions from Telecommunications Carriers

The TCA requires every telecommunications carrier that provides intrastate telecommunications services to contribute, in an equitable and nondiscriminatory manner, to state support mechanisms.¹²⁰ Telecommunications services means offering telecommunications for a fee to the public, or to such classes of users as to be effectively available to the public.¹²¹ States do not have the authority possessed by the FCC by virtue of 47 U.S.C. 254(d) to seek contribution based on "the public interest" from providers not covered by the definitions of telecommunications carrier and telecommunications services. Consequently, Washington's list of required contributors must be narrower than the expansive list of providers adopted by the FCC.¹²²

¹¹⁹ The Department of Social and Health Services has informed the WUTC staff that about 25% of those eligible for assistance in paying their telephone bill enroll in the program.

¹²⁰ 47 U.S.C. 254(f). N.B. The WUTC probably lacks authority under statute and case law to impose a contribution requirement on providers of telecommunications services. See WITA v. TRACER, 75 Wn. App. 356, 880 P.2d 50 (1994).

¹²¹ 47 U.S.C. 153(46). Pay phone service providers are not included in this definition due to the exemption provided for aggregators in the definition of telecommunications carrier. See 47 U.S.C. 153(44).

¹²² An argument can be made that Section 254(f) gives states the authority to adopt regulations consistent with the FCC regulations and thereby include the broader list of providers.

Required Contributors

Under the definitions described above, all wireline and wireless carriers must contribute to universal service support mechanisms on an equitable and nondiscriminatory basis. Additionally, WATS,¹²³ toll free, 900, MTS,¹²⁴ private line, paging, telex, telegraph, video and satellite services should contribute.¹²⁵

Private service providers are included as contributors to federal support mechanisms based on the FCC's permissive authority to include otherwise exempt providers because it is in the public interest to do so. The FCC found that competitive neutrality requires contributions from private service providers that, from time to time, sell or lease capacity on their networks. If contributions were not sought, the private service provider would have a competitive advantage over a common carrier offering the same services with an obligation to contribute.¹²⁶

The Federal-State Joint Board reached the same conclusion as the FCC but did not depend on the permissive authority. The Joint Board concluded that where a private service provider sells or leases capacity¹²⁷ it is providing services "to such class or

¹²³ Wide Area Telephone Service

¹²⁴ Message Telecommunications Service, also called DDD for Direct Distance Dial.

¹²⁵ ¶ 780, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

¹²⁶ ¶ 794-96, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

¹²⁷ It is the sale or lease of capacity that should trigger a requirement to contribute to universal service support with the amount contributed based on the revenue associated only with the sale or lease of excess capacity. Where a private service provider makes service available to its company, its affiliates or as part of a consortium and do not significantly impact the public switched telephone network, there should be no requirement to contribute. An

classes of users as to be effectively available directly to the public.”¹²⁸ The Joint-Board relies on the definition of telecommunications service to reach the same conclusion as the FCC.

Internet providers are not included in the list of contributors because the FCC has determined that information (internet) providers are not telecommunications providers.¹²⁹ Internet providers are not considered telecommunications providers because their service is to provide information, although that is accomplished with the use of the telephone network.

Option 1: Washington requires contributions from the same telecommunications carriers identified by the FCC, except for private service providers.

Option 2: Washington requires contributions from the same telecommunications carriers as the FCC, including private service providers.

Option 3: Washington requires contributions from the same telecommunications carriers as the FCC, including private service providers and internet service providers.

exception would be a consortium without any commonality of members other than a need for telecommunications services, in which case the consortium would essentially be a common carrier and should contribute.

¹²⁸ ¶788, Recommended Decision, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (November 8, 1996), quoting 47 U.S.C. 153(46).

¹²⁹ ¶ 83 and 788-90, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

Recommendation: Washington should require contributions from the same telecommunications carriers as the FCC, including private service providers which sell or lease capacity. This option provides the broadest list of providers without attempting to include internet service providers (which we recognized do not provide telecommunications services in part 1 of this report). Like the Joint Board, we recommend inclusion of private service providers which sell or lease capacity. This capacity is made available in the same market where common carriers make available their services to the public. It is true that the service that private service providers offer will never attract the attention of the general public as that term is used in its broadest interpretation, but the public that is interested in the high-speed data services offered by common carriers is the same public that would be interested in purchasing high-speed data service from private service providers. For this reason, we believe the Joint Board accurately concluded that private service providers selling or leasing capacity are offering telecommunications services to the public. Not only is the Joint Board's conclusion correct, it also has the virtue identified by the FCC in the rationale for its decision. Private service providers contributing to the universal service support mechanisms will have no competitive edge over common carriers making the same contributions based on sales of identical services.

Legislative Action: The legislature must give the WUTC authority to create and operate a universal service fund if this recommendation is to be implemented.



Basis for Assessing Contributions

The Joint Board and the FCC considered (1) gross revenue, (2) gross revenue net of payments to other carriers, (3) revenues derived from end-users, and (4) per-minute or per-line charges as factors on which assessments could be based.¹³⁰ The FCC concluded that revenues derived from end-users is the best basis¹³¹ while the Joint-Board determined that the most competitively neutral and easily administered basis is gross revenues net of payments to other carriers.¹³² The Joint Board and the FCC rejected both gross revenues and per-minute or per-line charges as options because the former may result in double payments on some revenue and because the latter could not be administered without complicated “equivalency ratios” reminiscent of the existing complicated formulas in use at present.

Gross Revenues Net of Payments to Other Carriers

The Joint-Board selected gross revenues¹³³ net of payments to other carriers as the preferred basis because it is the most competitively neutral, because it requires payments only when value has been added and because it is easiest to administer.¹³⁴ It is competitively neutral because it does not advantage vertically integrated companies

¹³⁰ ¶ 803-06, Recommended Decision, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (November 8, 1996) and ¶ 843-54, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

¹³¹ ¶ 848-50, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

¹³² ¶ 807-09, Recommended Decision, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (November 8, 1996).

¹³³ Gross revenue would include all intrastate and international revenue attributable to customer telecommunications activity in Washington State.

¹³⁴ Id.

over specialized providers or those that purchase wholesale. Payments are only made when value is added because payments to other carriers are subtracted from gross revenues. The net amount, or value-added, is a proxy for the additional activity the providers contribute to the public switched telephone network. This basis is easy to administer because providers already track gross revenue for the purpose of contributing to TRS¹³⁵ and they already track, for a variety of business and accounting purposes, payments to other carriers.

Revenues Derived From End-Users

The FCC selected revenues derived from end-users as the basis for assessing universal service support for reasons of competitive neutrality and ease of administration.¹³⁶ It is administratively easier, in the FCC's opinion, because wholesalers will not have to file revenue information with the fund administrator; but the FCC does acknowledge that it will have to develop a new database of end-user revenue information.¹³⁷ The major distinction which the FCC draws between revenue derived from end-users and gross revenue net of payments to other carriers is that the latter may result in support contributions being collected from some intermediate carriers with long-term contracts which would preclude raising rates to cover the cost of universal service

¹³⁵ TRS is the acronym for Telephone Relay System which provides access to the telephone network for hearing-impaired persons. Washington has a program to support the devices necessary for hearing-impaired persons to use the PSTN. It is authorized under RCW 80.36.195 and RCW 43.20A.725; \$0.14 cents is collected each month from telephone subscribers to support this service.

¹³⁶ ¶ 844, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

¹³⁷ Id. ¶ 848.

contributions.¹³⁸ The FCC did not indicate how many carriers might be so affected or how much money would be involved.

In comparison, the Joint Board rejected using revenues derived from end-users because it will result in no contributions from wholesalers in violation of the requirement that all carriers contribute to universal service support mechanisms.¹³⁹

The Joint Board also gave cognizance to the concern that the use of revenue derived from end-users as a basis for assessing contributions could lead to surcharges on customer bills¹⁴⁰ rather than the TCA requirement that carriers contribute.¹⁴¹

Gross Revenues

Contributions based on gross revenues were suggested to both the Joint Board and the FCC and both declined to choose this as a basis for assessment of contributions to universal support. The chief reason is that it would result in double payments when services are sold wholesale before they are sold to consumers. The wholesale seller of the service and the reseller would each have gross revenue which, when taken together, would be approximately double the value of the service.¹⁴² Their

¹³⁸ Id. ¶ 850.

¹³⁹ ¶ 805, Recommended Decision, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (November 8, 1996). See also 47 U.S.C. 254.

¹⁴⁰ A line-item tax on customer bills is advocated by many telephone companies as the best method to support universal service.

¹⁴¹ Id.

¹⁴² ¶ 804, Recommended Decision, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (November 8, 1996) and ¶ 845, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

contributions would be made for the same service and the double counting results.

Per-Line or Per-Minute Charges

Again, both the Joint Board and the FCC rejected per-line or per-minute charges as factors on which contributions should be based.¹⁴³ Each had the same reason for rejecting these options. Many telecommunications services are not sold per-line or per-minute. Alternate methods of charging have been growing in popularity as combinations of services are packaged and sold together. In order to determine how many minutes or lines were purchased it would be necessary to establish complex allocation formulas which will not move the telecommunications industry in the direction of explicit and specific supports mechanisms for universal service. As a result, there would be great administrative difficulty if these non-revenue-based measures were chosen. At the same time, non-revenue-based measures would not be competitively neutral because of the uncertainty that assessments for contributions would be fairly derived for all types of carriers with their varied pricing schemes.¹⁴⁴

Option 1: Washington assesses contributions for universal support on gross revenues net of payments to other carriers. This option is competitively neutral, easy to administer and requires a contribution only when value is added. It does not favor vertically integrated companies over specialized carriers and wholesalers, even though it results in contributions from those carriers.

¹⁴³ ¶ 806, Recommended Decision, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (November 8, 1996) and ¶ 852, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

¹⁴⁴ Id.

Option 2: Washington assesses contributions for universal support based on revenues derived from end-users. This option will avoid assessing contributions on intermediate carriers with long-term contracts who are thus unable to build contributions to universal service into their rates while their competitors without long-term price commitments can adjust their rates upward to reflect their contribution. It is not particularly administratively burdensome, but it will require development of a new database. It will result in wholesale carriers making no contributions, in apparent contravention of the TCA requirement that all carriers contribute on an equitable and non-discriminatory basis. It may increase the possibility that contributions are recovered by surcharges on customer telephone bills.

Option 3: Washington assess contributions for universal service support based on gross revenues. This option is simple to calculate and the necessary information is already available. However, where services are sold at wholesale one or more times, a double contribution will result each time there is a resale.

Option 4: Washington assess contributions for universal service support based on per-line or per-minute (non-revenue-based) factors. This option will require significant administrative effort and complex, but not necessarily accurate, calculations of equivalencies when service is not sold on a per-line or per-minute basis. It may inhibit the increased packaging of services for sale other than on this basis.

Recommendation: Washington should base assessments for contributions to

universal service on gross revenues net of payments to other carriers. This option is competitively neutral because all carriers, wholesale and retail, large, small or specialized, contribute on the same basis. It does not advantage vertically integrated companies. This option avoids double counting; contributions are required only when value is added and when activity on the telephone network is increased. It is easy to administer for large and small companies alike because carriers already collect the information necessary to make the calculations.

Legislative Action: The legislature must give the WUTC authority to create and operate a universal service fund if this recommendation is to be implemented.



Disbursement of Universal Service Funding--Making a Market

The TCA's emphasis on competition is intended to result in customers, including customers in high-cost locations, having a choice among several providers of local telephone service. Competitive local exchange carriers (CLECs) are expected to challenge incumbent local exchange carriers (ILECs) for customers. This is already occurring in Washington; however, the competition is occurring only in urban and suburban areas because the number of potential customers who can be served at relatively low cost is far greater than in rural areas.¹⁴⁵

¹⁴⁵ As noted earlier in n. 56, the current market share held by CLECS remains small.

If universal service is to be maintained, support is necessary to induce CLECs to compete in rural areas as well as to retain ILECs in those areas. Absent this support, companies will shun high-cost customers while chasing low-cost customers. They will also place new, more efficient infrastructure in areas full of low-cost customers and not maintain, let alone expand, infrastructure in areas where high-cost customers reside and work. The Commission, through universal service support disbursements, should make a market for the competitive provision of basic telephone service where none would exist without state intervention.

Competitive Neutrality--Universal Service Dollars Should Follow High Cost Customer Locations, Not Companies

In order to maintain universal access and affordability, and at the same time bring choice to all customers in all areas, the TCA is designed to maintain support and assign the support to the high-cost customer location regardless of the provider. The Commission must structure a universal service program that will support defined basic services and not discourage CLECs from entering into high-cost markets and thereby denying customers choices for local service provision.¹⁴⁶ The way to accomplish this is to associate the support with the high cost customer rather than with the ILEC serving the customer, as it is today.

A Profound Change

Universal service support which follows the customer represents a profound change

¹⁴⁶ The Joint Board and the FCC concluded that portability of support will aid the entry of competition in rural areas. See ¶ 311, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

from the present practice of supporting high-cost monopoly companies. It will benefit customers of price-averaged companies (non-rural ILECs) because those companies may reduce rates in urban areas in order to compete with CLECs.¹⁴⁷ At the same time, the ILEC is still assured of sufficient revenue to serve consumers in high-cost locations who continue to be their customers. It will also benefit customers of rural companies because it promotes competition, the necessary ingredient to spur increased attention to customer service and deployment of new technology. Rural companies will continue to receive necessary support so long as they provide customers with good service and new technology.

Eligible Telecommunications Carriers and the Obligation to Serve

Incumbent local exchange companies and new competitors may request designation as eligible telecommunications carriers (ETC) under the TCA.¹⁴⁸ This is the prerequisite to collect universal service funds for serving customers in high-cost locations. In Washington, all incumbents have filed for ETC status,¹⁴⁹ which eventually will lead to collecting universal service funds for serving areas which they presently serve with the support of implicit support (primarily price averaging for USWC and GTE; through federal and some state high-cost support for the smaller companies). This is one way in which implicit support will be transformed into explicit support.

¹⁴⁷ At present, USWC has a proposal before the Commission which would raise basic residential rates nearly \$3.00 per month. See Docket #UT-970766

¹⁴⁸ See 47 U.S.C. 214(e) and 47 U.S. C. 254(e).

¹⁴⁹ Each incumbent filed for the entire area which it now serves, with the exception of USWC. USWC filed for ETC designation in several metropolitan exchanges but did not file in any of its high-cost exchanges. Like any carrier, it may file in the future for ETC designation. One CLEC, US Cellular, filed for several USWC rural exchanges and three GTE rural exchanges.

Not all competitive local exchange carriers (CLECs) will be eligible to receive universal service. Many CLECs may not seek this designation from the Commission; they may be content to make money serving special types of customers in urban areas where cost conditions do not necessitate high-cost support.

Those CLECs that want to receive universal service support will ask for ETC designation for those service areas where they believe the cost to provide service will be less than their cost of providing the service.¹⁵⁰ Ratepayers, ILECs and other CLECs will expect the Commission to avoid providing support above the cost of service. Ideally, the Commission will set a support level which will encourage CLECs to enter the high-cost markets and at the same time encourage innovation in service and cost saving efforts on the part of the ILEC and CLECs.

The Size of the Fund

The size of the fund needed to support universal service will depend upon the services supported, the number of lines supported, the actual cost of the supported lines, a determination of affordability, and the amount paid by consumers for their individual lines.

Services and Lines to Be Supported

The amount necessary to support universal service depends on the services and

¹⁵⁰ The Commission has made ETC designations in 1997 to ensure continued receipt of federal universal service funds in 1998 for incumbent local exchange companies. This action was required by the FCC decision to continue providing federal support in 1998 only to those companies designated as ETCs by their state commission not later than December 31, 1997. ETC status is also necessary for eligibility to collect federal Lifeline (low-income) program funds.

number of lines to be supported. In section one, nine services were recommended as basic services which should be supported by universal service support mechanisms. Those services are available today throughout Washington and it will not increase the necessary level of support if they are chosen as the basic services to be supported. If additional services are added to the list, internet access or call waiting for example, the cost of support will increase and the size of the fund will have to increase.

The same is true with the number of lines which are supported. At present in Washington, all lines, business and residential, second, third and even fourth lines, are supported if they are provided by a high-cost company or if they are provided by a price-averaged company and are in a high-cost location. As a result, Washington's total expenditure on telecommunications does not need to be increased to continue supporting all telephone lines.¹⁵¹

The FCC, however, appears ready to support only one residential line per household and one business line.¹⁵² The FCC is taking comments on methods for attempting to determine which residential lines are "primary" and which are not so that support will only be provided for the least number of lines necessary to guarantee minimum access

¹⁵¹ The manner in which support is collected and disbursed will change; if a new state fund is created, it will be larger than the present fund, however it will be made up of dollars that once were funding universal service in hidden, implicit ways not apparent to consumers or policy makers. Total state telecommunications spending need only increase if added services are supported.

¹⁵² See ¶ 296, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997), and ¶ 5 to 22, Notice of Proposed Rule Making (NPRM) In the Matter of Defining Primary Lines, CC Docket 97-181 (September 4, 1997). While rural carriers are supported almost entirely by NECA (now succeeded by the Universal Service Administrative Corporation) and support continues based on embedded costs, the FCC's plan to limit the number of lines to be supported only affects non-rural carriers. This will, presumably, change when rural carriers are moved from embedded costs to proxy models for the determination of support.

to the telephone network for public health, safety and emergency purposes. A decision by the FCC to support only one residential and one business line would represent a reduction in the present level of federal support.¹⁵³ Not only would a reduction of federal support result, it appears that the FCC envisions a considerable administrative effort will be necessary to verify and enforce their effort to limit support to one residential line.¹⁵⁴ In comparison, the current mechanisms support all the lines of high-cost telecommunications carriers and, while the calculations involved are administratively burdensome, at least they do not require any intrusion on customer premises to determine the number of telephone lines.¹⁵⁵

The Joint Board recommended support for one residence line and one business line as well.¹⁵⁶ The Joint Board considers the needs of a single-line business customer to be similar to that of a residence in that they may need access to public health and safety services and for employment reasons.¹⁵⁷ However, the Joint Board recommends that support for the single-line business customer be less than that for a residential customer in the same high-cost area and the FCC is silent on this.¹⁵⁸

¹⁵³ This would represent a reduction because the FCC, like the states, currently supports high-cost companies not high-cost customers. Federal support funds are paid to high-cost companies based on, inter alia, the number of access lines. Companies report all their lines, including all second residential lines and all multiple lines going to businesses. Federal support funds are therefore paid for all lines, not just so-called primary lines.

¹⁵⁴ Id. ¶ 17 to 22.

¹⁵⁵ It will not be easy, without inspection or questioning, to determine, for example, if a family has multiple lines under names of different family members.

¹⁵⁶ ¶ 85 to 92, Recommended Decision, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (November 8, 1996).

¹⁵⁷ Id. ¶ 91.

¹⁵⁸ Id. ¶ 92.

Those who have opposed support for business lines have noted that they do not serve the same purpose as a residential line; that businesses make decisions about where they locate based on costs, including cost of telecommunications; and that the cost of telecommunication services are a cost of doing business which can be deducted in tax calculations. With respect to location, many noted that, for example, a business locating in an urban area may have low-cost telecommunications services but will pay higher real estate costs than a business in most rural areas, thus offsetting the difference in cost of telecommunications services.

A second residence line is not needed in order to have basic services, including access to public health and safety services. A second line is generally a convenience, whether it is for the use of a child or for internet or FAX use without the necessity of unplugging and switching the primary line. A second, or third or even fourth line, represents an economic choice rather than a necessary household expenditure.

The size of the fund needed to support universal service, as stated above, depends on the services to be supported and the number of lines. Washington does not have to increase total telecommunications spending in order to maintain the status quo. At the same time, if the services or lines to be supported were reduced, the size of the fund could be reduced, but only by driving up the price of second lines to something approaching their actual cost. In Washington, that ranges from below \$10.00 per month to as much as \$325.00 per month.

The Cost of Supported Lines

The biggest determinate of the size of the fund will be the cost of the supported lines. The cost of local loops varies widely from urban to rural, primarily based on distance, but also on geography. With over three million lines in Washington, it is important to base support on as accurate a measure of loop cost as can be determined. Three ways to determine cost of have been proposed: measure the cost of every individual line, measure the average cost of lines in an exchange, and measure cost based on a model.

Measure Cost of Individual Lines

If the cost of each individual line were measured, that would produce the most accurate basis for determining the level of support necessary for provision of basic service. Unfortunately, because of the millions of lines, this is not a reasonable undertaking. It is not possible to measure the individual cost of over three million lines.

Measure Cost at the Exchange Level

Unlike individual measurements, it is possible to measure the average cost of all the lines contained in a telephone exchange. (See exchange map included with this report.) This data could be developed, but because it is average cost data it is an inexact measure and its use will result in below cost support to a company which serves the higher cost loops in an exchange and above cost support for a company which serves the lower cost loops in the same exchange.¹⁵⁹

¹⁵⁹ As time goes on, lines can be geo-coded at the census block group (CBG) level to more precisely locate them in relation to the local exchange central office. See n.148, *infra*.

Measure Cost By Proxy Model

The greatest effort invested into the several competing cost proxy models is going into modeling loop length in order to determine loop cost. This modeling takes place at a much smaller level than the exchange. Some are modeling at the census block group (CBG)¹⁶⁰ level and others are using grids 1500 feet square. Both, when completed, will be much more accurate than average loop cost in an exchange.

Affordability and Prevention of Subsidy

The TCA requires that universal service be available at rates that are affordable.¹⁶¹ It also requires that universal service supports do not subsidize other services subject to competition.¹⁶²

In order to set the support per line, it is necessary to subtract from the cost either the price of local service or the average revenue per line.¹⁶³ The choice depends on which factor, the cost of basic service or revenue per line, results in affordability while preventing subsidy of services subject to competition. In order to avoid too great a subsidy for high-cost customers at the expense of low-cost customers, it is necessary

¹⁶⁰ "A census block group generally contains between 250 and 550 housing units, with the ideal size being 400 housing units." 1990 Census of Population, General Population Characteristics, Washington. Washington D.C.: U.S. Dept. of Commerce (1992), p. A-4.

¹⁶¹ 47 U.S.C. 254. Earlier in the report, in the discussion of penetration rates and enrollment in the Telephone Assistance Program for low-income consumers, we concluded that present rates are affordable.

¹⁶² 47 U.S.C. 254(k). States are required to establish any necessary cost allocation rules, accounting safeguards and guidelines to ensure that universal service supports bear no more than their reasonable share of joint and common costs used to provide supported services.

¹⁶³ The calculation of average revenue per line will be based on the basic monthly service charge, discretionary services charges (e.g. call waiting, call forwarding, caller I.D. and similar services), intrastate and interstate access charges and other telecommunications revenues.

to approximate the value of providing service as closely as possible.

Price of Local Service and Average Revenue Per Line

The value to a carrier of providing service is average revenue per line. If they can provide service to a customer at a cost less than their revenue, they make a profit. In a situation where support is provided, then the carrier makes a profit if the average revenue per line combined with support are greater than their cost of providing service. If the support is too high, a windfall results; if it is too low, carriers will not compete for customers in high-cost areas.

In order to determine the amount of support needed by a carrier to make it profitable to provide service in high-cost locations, one can compare either the price for basic monthly service or the average revenue per line to the cost of providing service.

Because a majority customers make some toll calls or subscribe to some features (e.g. call waiting, voice mail), revenue per line is always greater than the price of local service. In order to avoid windfalls and encourage efficiency and cost-cutting, subtracting average revenue per line from the average cost is necessary to determine the support level. Use of average revenue per line also prevents any subsidy of competitive services with universal service supports in compliance with 47 U.S.C. 254(k) and will result in a significantly smaller fund size than would be the case if the price of local service is subtracted.

Option 1: Washington chooses to support all lines, to determine cost of lines with a forward looking economic cost proxy model, and to determine support by

subtracting the average revenue per line from the cost. This option will promote competition, efficiency and cost-cutting as a way of reducing telecommunications cost without reducing the level of telecommunications service presently supported in Washington. (Embedded costs would be used for rural companies until such time as both the FCC and the Commission move to a cost proxy model for rural carriers.)

Option 2: Washington chooses to support only one residence line and one business line, to determine cost of lines with a forward looking economic cost proxy model, and to determine support by subtracting the average revenue per line from the cost. This option will promote competition, efficiency and cost-cutting as a way of reducing telecommunications cost and will reduce the cost of support by limiting the number of supported lines. At the same time, for those who choose to keep additional lines, the cost may rise significantly. If the price of second lines in rural areas rise significantly above the price in urban areas comparability between urban and rural rates will be lost in contravention of the TCA.¹⁶⁴

Recommendation: Washington should support all telephone lines and determine support by subtracting average revenue per line from the cost of each line. This will promote efficiency and increased deployment of new telecommunications services without disrupting the services already in place in households and businesses in Washington.

Legislative Action: The legislature must give the WUTC authority to create and

¹⁶⁴ See 47 U.S. C. (B)(3), requiring comparability of rates for the same services in urban and rural areas

operate a universal service fund if this recommendation is to be implemented.



Neutral, Third-Party Administration of the Fund

Administration of the fund will be a complex, time-consuming job. It should not be done by the WUTC, nor should it be done by any individual or organization with a financial or other interest in telecommunications. The FCC, following the recommendation of the Joint Board, has opted to seek a neutral, third-party administrator for the federal universal service fund.¹⁶⁵

The fund administrator will handle proprietary and confidential information from all telecommunications service providers in Washington. The WUTC handles many proprietary and confidential filings, and they have increased in number as competition draws closer. Increased competition means an increasing need for companies to safeguard information which, despite its confidential nature, will have to be turned over to the administrator for calculation of payments.¹⁶⁶ Safe-guarding confidential information necessitates using a neutral party.

The present administration of the state universal service fund is done by the

¹⁶⁵ ¶ 861 First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).

¹⁶⁶ An example of the type of information which the fund administrator will need to know and which would be confidential is the number of customers each company has in each local exchange. Competitors would find it advantageous to know what market share other companies have.

Washington Exchange Carrier Association (WECA). Its board of directors is composed of representatives of incumbent, high-cost companies. In a competitive era, however, it would be inappropriate for WECA to continue in this role.¹⁶⁷ In order to ensure confidence in the administration of the fund, a neutral party is required.

While the WUTC is neutral, it does not have staff available to operate the fund. This is a function which can best be carried out by a contractor with oversight from WUTC staff. This should provide the best administration for the least expense and provide for neutrality with sufficient oversight to ensure that confidentiality is maintained.

Recommendation: Washington should contract with a neutral, third-party for design, operation and administration of a universal service fund. This should be accomplished through a competitive bid process which excludes interested parties.

Legislative Action: The WUTC needs statutory authority to contract for operation of the fund by a neutral, third party.



¹⁶⁷ The FCC has decided to remove control of the federal high-cost fund from the National Exchange Carrier Association (NECA) for the same reason. See ¶ 866, First Report and Order, In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (May 8, 1997).